# **The Financial Crisis and Information Gaps**



# **Implementation Progress Report**

Prepared by the IMF Staff and the FSB Secretariat

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# ACRONYMS

2008 SNA	System of National Accounts 2008
ABS	Asset Backed Securities
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BOPCOM	IMF Committee on Balance of Payments Statistics
BPM6	Balance of Payments and International Investment Position
	Manual, sixth edition
BSA	Balance-sheet approach
CDS	Credit Default Swaps
CGFS	Committee on the Global Financial System
CPIS	Coordinated Portfolio Investment Survey
DFID	UK Department for International Development
ECB	European Central Bank
FSB	Financial Stability Board
FSIs	Financial Soundness Indicators
G-20	The Group of Twenty
GFS	Government Finance Statistics
GFSM 2001	Government Finance Statistics Manual, 2001
G-SIFIs	Global Systemically Important Financial Institutions
HSS	BIS-ECB-IMF Handbook on Securities Statistics
IAG	Interagency Group on Economic and Financial Statistics
IBS	International Banking Statistics
IFS	International Financial Statistics
IIP	International Investment Position
IMF	International Monetary Fund
IMFC	IMF International Monetary and Financial Committee
IOSCO	International Organization of Securities Commissions
IRB	Internal Ratings Based
ISWGPS	Inter-Secretariat Working Group on Price Statistics
IT	Information Technology
LEI	Legal Entity Identifier
MAP	Mutual Assessment Process
NSDP	National Summary Data Page
OECD	Organisation for Economic Co-operation and Development
OFR	Office of Financial Research
PGI	Principal Global Indicators
PIN	Public Information Notice
REER	Real Effective Exchange Rates
RPPI	Handbook on Residential Property Price Indices
SDDS	Special Data Dissemination Standard
SDMX	Statistical Data and Metadata eXchange
SNA	System of National Accounts
STA	IMF's Statistics Department
TFFS	Task Force on Finance Statistics
UNCTAD	United Nations Conference on Trade and Development
UNSD	United Nations Statistics Division
WEO	World Economic Outlook

#### **EXECUTIVE SUMMARY**

This report updates on progress by the Financial Stability Board (FSB) Secretariat and International Monetary Fund (IMF) staff in implementing the 20 recommendations in the report *The Financial Crisis and Information Gaps* endorsed by the Group of Twenty (G-20) Finance Ministers and Central Bank Governors in November 2009. Since the last progress report a year ago, consultations with national authorities revealed broad agreement with, and a positive view of, the G-20 Data Gaps Initiative, with better identification of the build-up of risks in the financial sector and financial interconnectedness (domestic and cross-border) being among the highest priorities.

Work in the priority areas is progressing well:

- A draft reporting template for the global systemically important financial institutions has been developed for banks, with the FSB Plenary agreeing to progress this work.
- Agreements have been reached to enhance the Bank for International Settlements (BIS) international banking statistics (IBS) data to provide more granular information on a nationality basis; to increase the frequency from annual to semi annual of cross-border security holdings data in the IMF's Coordinated Portfolio Investment Survey (CPIS); and to introduce a reporting template to provide a better understanding of domestic vulnerabilities by economic sector. The challenge over the coming year will be to start implementing these enhancements.

Data availability is also increasing:

- Reporting by G-20 economies on Financial Soundness Indicators (FSIs) and quarterly International Investment Position (IIP) data is increasing. The BIS has started publishing data on real estate prices. The public sector debt database has been launched jointly by the World Bank and the IMF, initially primarily for developing and emerging economies. The first stage of enhanced reporting of credit default swaps (CDS) data has begun with the second stage to be introduced later this year.
- The Principal Global Indicators (PGI) website has expanded to include data from the five jurisdictions of the FSB that are not in the G-20.

Conceptual work is also progressing:

• Part 2 of the *BIS-ECB-IMF Handbook on Securities Statistics*, covering debt securities holdings, is completed and work has started on Part 3 that will cover the issuance and holdings of equity securities. The *Public Sector Debt Statistics Guide* has been released. Conceptual work to develop datasets is advancing to support analysis of the build-up of risk in the financial sector, as well as on the distribution of household income, wealth, and consumption across social-economic classes.

But important challenges remain:

- Efforts to further strengthen the availability of consistent and comparable economic and financial data remain important, including:
  - Sustaining efforts to close gaps in existing data collections for G-20 economies and, in some instances, for significant financial centers.
  - Improving the data availability on the activities of nonbank financial institutions.
  - Harmonizing data collections from G-20 economies by international agencies across macroeconomic statistics—a high priority over the coming year.
- Ensuring adequate resourcing of statistical work; and limiting the reporting burden on the private sector, national, and international authorities.
- Ensuring appropriate access to data as macroprudential analysis needs more granular data than has been required for macroeconomic analysis. Legal frameworks for data sharing and for data collection may need to be reviewed in some instances.

The report seeks endorsement by the G-20 Finance Ministers and Central Bank Governors of the action plans and timetables summarized in Table 1 below.

# Table 1. Summary Table: Progress Report, Action Plans, and Timetables

Reco	ommendation	Progress to Date	Action Plans and Timetables
1.	Staff of the FSB and the IMF report back to G-20 Finance Ministers and Central Bank Governors by June 2010 on progress, with a concrete plan of action, including a timetable, to address each of the outstanding recommendations. Thereafter, staff of the FSB and IMF to provide updates on progress once a year. Financial stability experts, statisticians, and supervisors should work together to ensure that the program is successfully implemented.	As requested in June 2010, the present report, prepared by the FSB Secretariat and IMF staff, is provided to the G-20 Finance Ministers and Central Bank Governors by June 2011.	The FSB Secretariat and IMF staff to provide the next progress report by September 2012. IMF staff intends to undertake regional visits to discuss further progress towards implementation of the recommendations. The IMF to consider setting up procedures to monitor progress, including asking G-20 economies to undertake self assessments to update the detailed information from the G- 20 bilateral consultations.
Mor	itoring Risk in the Financial Sector		
2.	The IMF to work on increasing the number of countries disseminating Financial Soundness Indicators (FSIs), including expanding country coverage to encompass all G-20 members, and on other improvements to the FSI website, including preferably quarterly reporting. FSI list to be reviewed.	Over the past year, the number of G-20 economies reporting FSIs has increased by three to 18 economies (the euro area as a currency union is not requested to report); of which 10 provide data on a quarterly or more frequent basis. The seven FSIs in the IMF Special Data Dissemination Standard (SDDS), submitted on an encouraged basis, are available via the IMF's Dissemination Standards Bulletin Board for seven of the G-20 economies that are SDDS subscribers. The FSI data reported regularly to the IMF have been integrated into the IMF <i>Global Financial Stability Report</i> starting in April 2011.	In November 2011, the IMF is to organize a meeting of the FSIs Reference Group of Experts to discuss possible changes in the list of FSIs and the methodology for compiling them. The work program for the <i>Eighth Review</i> of the IMF Data Standards Initiatives, scheduled for the first half of 2012, includes the possibility of strengthening the Data Standards, including regarding FSIs, through the possible establishment of a higher tier (SDDS-Plus).
3.	In consultation with national authorities, and drawing on the <i>Financial Soundness Indicators</i> <i>Compilation Guide</i> , the IMF to investigate, develop, and encourage implementation of standard measures that can provide information on tail risks, concentrations, variations in distributions, and the volatility of indicators over time.	IMF staff is close to developing conceptual guidance for discussion at the FSIs Reference Group of Experts.	IMF staff to present the conceptual guidance developed for discussion at the meeting of the FSIs Reference Group of Experts scheduled for November 2011.

4.	Further investigation of the measures of system-wide macroprudential risk to be undertaken by the international community. As a first step, the BIS and the IMF should complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, drawing on inputs from the Committee on the Global Financial System (CGFS) and the Basel Committee on Banking Supervision (BCBS).	The IMF and the BIS have decided that the BIS will focus its investigation on the banks and the IMF on the shadow banks. Drawing on the BIS IBS data, the BIS has completed its conceptual work on defining measures of maturity mismatches ("funding gaps") on banks' international balance sheets. The IMF is completing its conceptual work on maturity mismatch and leverage data in cooperation with the FSB task force on shadow banking. This FSB task force was established following the request to the FSB by the G-20 Leaders in November 2010 to develop recommendations to strengthen the oversight and regulation of the shadow banking system.	IMF staff intends to complete their work soon after June 2011. The work of the BIS on banks can be further enhanced if the CGFS approves the enhancements to the IBS data (see recommendations 10 and 11).	
5.	The CGFS and the BIS to undertake further work in close cooperation with central banks and regulators on the coverage of statistics on the credit default swaps (CDS) markets for the purpose of improving understanding of risk transfers within this market.	The CGFS decided to expand the CDS statistics in September 2009. Reporting central banks have provided more detailed data on the type of counterparties from June 2010, and will provide more detail on the geography of counterparties and underlying instruments from June 2011. In total, 11 economies report semi-annual CDS data of which seven are G-20 economies. The reporting population is expected to expand by two economies at end-2011, of which one is a G-20 economy. The BIS currently has no plans to ask the remaining G-20 economies to report semi-annual CDS data given the limited size of their markets in CDS contracts.	Once data are reported for end-June 2011 this recommendation will be considered completed.	
6.	Securities market regulators working through IOSCO to further investigate the disclosure requirements for complex structured products, including public disclosure requirements for financial reporting purposes, and make recommendations for additional improvements if necessary, taking account of work by supervisors and other relevant bodies.	In April 2010, IOSCO published a report on Asset Backed Securities (ABS) Disclosure Principles providing guidance to securities regulators who are developing or reviewing their regulatory disclosure regimes for public offerings and listings of ABS (http://www.iosco.org/news). In April 2011, IOSCO held the first meeting of a new Standing Committee on Risk and Research with the intention of creating a methodology for securities regulators undertaking research into systemic risk.	This recommendation is completed.	

7.	Central banks and, where relevant, statistical offices, particularly those of the G-20 economies, to participate in the BIS data collection on securities and contribute to the further development of the BIS- ECB-IMF <i>Handbook on Securities Statistics (HSS)</i> . The Working Group on Securities Databases to develop and implement a communications strategy for the <i>HSS</i> .	Part 2 (debt securities holdings) of the BIS-ECB-IMF <i>HSS</i> was published in August 2010. This followed publication of Part 1 (debt securities issues) in 2009. Work has started on Part 3 (issues and holdings of equity securities). The BIS is collecting available data on securities from member central banks, including from 16 G-20 economies.	Part 3 of the <i>HSS</i> is expected to be finalized around the end of calendar 2011. The BIS intends to expand its coverage of quarterly securities issuance data using the common template to all G-20 economies during the remainder of 2011. Two further common templates, to be agreed at the international level, are being developed in coordination with the work on sectoral accounts, and consistent with national accounts based data: the intention is for economies to supply to the BIS additional detail on securities issuance by subsector, maturity, and interest rate; and on securities holdings by sector. Once these tasks are finalized, this recommendation will be considered completed.
Inte	rnational Network Connections		
8.	The FSB to investigate the possibility of improved collection and sharing of information on linkages between individual financial institutions, including through supervisory college arrangements and the information exchange being considered for crisis management planning. This work must take due account of the important confidentiality and legal issues that are raised, and existing information sharing arrangements among supervisors.	The FSB Working Group on Data Gaps and Systemic Linkages was set up to take forward the work on recommendations 8 and 9. It completed its work, including developing a common draft template, and reported to the FSB Plenary in April 2011. The latter approved the proposals to progress work on a common template to its final form for improving the collection, and sharing among relevant authorities, of data on global systemically	The follow-up work to take forward the outcome of the FSB Plenary has commenced. A phased approach is envisaged. Key decisions are expected to be taken by the FSB Plenary in late 2011 on the final form of the common template and the data-sharing arrangements among supervisory authorities and with the central data hub; and in late 2012 on broader data sharing among the official sector. The collection of data is expected to start in 2012 and, through a series of incremental steps, be fully operational by end-2014. New agreements may need to be reached to facilitate the sharing of data received by the data hub. The
9.	The FSB, in close consultation with the IMF, to convene relevant central banks, national supervisors, and other international financial institutions, to develop by end-2010 a common draft template for systemically important global financial institutions for the purpose of better understanding the exposures of these institutions to different financial sectors and national markets. This work should be undertaken in concert with related work on the systemic importance of financial institutions. Widespread consultation would be needed, and due account taken of confidentiality rules, before any reporting framework can be implemented.	important financial institutions (G-SIFIs). A consultation process is to be undertaken to provide additional information on the costs and benefits of alternative options, as well as on the legal aspects. This will guide the decision on the final form and phased implementation of the common template. Preparatory work is also commencing on strengthening data-sharing arrangements and protocols within the official sector, including a review of the legal aspects. It has been agreed to commence preparatory work on the establishment of a central data hub at the BIS to store the data reported by national authorities.	initial focus of the work on a common template for G-SIFIs has been banks, but work to include nonbank financial institutions is scheduled to start in the coming year.

10.	All G-20 economies are encouraged to participate in the IMF's Coordinated Portfolio Investment Survey (CPIS) and in the BIS's international banking statistics (IBS). The IMF and the BIS are encouraged to continue their work to improve the coverage of significant financial centers in the CPIS and IBS, respectively. The BIS and the CGFS to consider, among other improvements, the separate identification of nonbank financial institutions in the consolidated banking data, as well as information required to track funding patterns in the international financial system. The IMF, in consultation with the IMF's BOPCOM, to strive to enhance the frequency and timeliness of the CPIS data, and consider other possible enhancements, such as the institutional sector of the foreign debtor.	Coverage of significant financial centers and of other economies, including G-20 economies in the BIS IBS and the IMF CPIS has continued to be good although further improvement is needed. For the BIS IBS, there are five G-20 economies that do not report data on either a locational or consolidated basis; and there is one large offshore centre missing in the reporting of the locational data. For the CPIS, there are two G-20 economies that do not report data; and there are a significant number of offshore centers that do not report, the same as last year. For the CPIS, the IMF Committee on Balance of Payments Statistics (BOPCOM) agreed to increase the frequency (from annual to semi annual) and timeliness (a dissemination lag of less than nine months) of the data, and to collect data on the institutional sector of the foreign debtor on an encouraged basis. The first set of enhancements to the BIS IBS has been approved	Both the BIS and the IMF to continue working to increase country participation in their surveys, including by G-20 economies. The CGFS ad-hoc group for statistics is working on a second set of enhancements to present to the CGFS for approval during 2011. Improvements in the frequency, timeliness, and scope of the CPIS survey may be implemented in time for the reporting of 2013 data.
12.	The IMF to continue to work with countries to increase the number of International Investment Position (IIP) reporting countries, as well as the quarterly reporting of IIP data. The <i>Balance of</i> <i>Payments and International Investment Position</i> <i>Manual</i> , sixth edition ( <i>BPM6</i> ) enhancements to the IIP should be adopted by G-20 economies as soon as feasible.	by the CGFS. In March 2010, the IMF Executive Board decided to prescribe for subscribers to the IMF SDDS, after a four-year transition period, quarterly reporting (from annual) of the IIP data, with a maximum lag of one quarter (quarterly timeliness). Among the G-20 economies, 10 economies disseminate quarterly IIP data, increasing from eight a year ago. Six economies have plans to introduce quarterly reporting. To assist implementation, in March 2011 the IMF produced a pamphlet to advise compilers on quarterly IIP compilation.	IMF staff is working with economies to implement the Executive Board decision on the SDDS by September 2014. IMF staff will encourage reporting by the G-20 economy that does not disseminate IIP as yet, and will introduce in 2012 the new specific requirements for reporting data consistent with <i>BPM6</i> standards in consultation with the BOPCOM.
13.	The Interagency Group on Economic and Financial Statistics (IAG) to investigate the issue of monitoring and measuring cross-border, including foreign exchange, derivatives, exposures of nonfinancial, and financial, corporations with the intention of promoting reporting guidance and the dissemination of data.	A working group has been created under the auspices of the IAG and led by the BIS. In cooperation with the Irving Fisher Committee on Central Bank Statistics, a workshop was conducted in Basel in January 2011 to discuss the key issues and the way forward. As a first step in the work on improving data availability	Following the January 2011 Workshop, the IAG working group is to develop a reference document, consulting with major stakeholders and drawing on the material presented to the Workshop. The first part of the document will focus on evolving user requirements, and could possibly be ready in 2012.

14.	The IAG, consulting with the FSB, to revisit the recommendation of the G-20 to examine the feasibility of developing a standardized template covering the international exposures of large nonbank financial institutions, drawing on the experience with the BIS's IBS data, other existing and prospective data sources, and consulting with relevant stakeholders.	on the international exposures of large nonbank financial institutions an inventory of data on cross-border positions has been developed. The inventory will be made available through the PGI website by mid-2011.	
Secto	oral and Other Financial and Economic Datasets		
15.	The IAG, which includes all agencies represented in the Inter-Secretariat Working Group on National Accounts, to develop a strategy to promote the compilation and dissemination of the balance-sheet approach (BSA), flow-of-funds, and sectoral data more generally, starting with the G-20 economies. Data on nonbank financial institutions should be a particular priority. The experience of the ECB and Eurostat within Europe and the OECD should be drawn upon. In the medium term, including more sectoral balance sheet data in the data categories of the SDDS could be considered.	A working group has been created under the auspices of the IAG and led by the IMF. An IMF/OECD Conference of Sectoral Accounts Experts was conducted on February 28–March 2, 2011 in Washington D.C., which agreed on the basic outline of a reporting template, and the timeframe and priorities for implementation.	The IAG working group will take forward the outcomes of the conference, including the draft reporting template, and develop an implementation plan with the intention of starting data collection during the coming year. As far as possible the work will be integrated with the implementation of the <i>System of National Accounts 2008</i> (2008 SNA) occurring in many economies at the same time. The reporting template will be finalized and consultations with the national experts will be undertaken, including through relevant OECD working parties. The reporting frameworks for recommendations 7, 12, and 17 will be consistent with the sectoral accounts framework. The IAG is looking to hyperlink available sectoral accounts data on the PGI website. The work program for the <i>Eighth Review</i> <i>of the IMF Data Standards Initiatives</i> , scheduled for the first half of 2012, includes the possibility of strengthening the Data Standards, including integrated sectoral balance-sheet information, through the possible establishment of a higher tier (SDDS-Plus).
16.	As the recommended improvements to data sources and categories are implemented, statistical experts to seek to compile distributional information (such as ranges and quartile information) alongside aggregate figures, wherever this is relevant. The IAG is encouraged to promote production and dissemination of these data in a frequent and timely manner. The OECD is encouraged to continue in its efforts to link national accounts data with distributional information.	The OECD and Eurostat set up two expert groups in early 2011 with member country participation. One group is to investigate the measurement of disparities in a national accounts framework (micro-macro); and the other group will investigate the joint distribution of income, consumption, and wealth (micro). Work has started and is progressing well.	The micro-macro group is to define a common methodology and to implement pilot studies with results expected by the end of 2012. The micro group will undertake methodological work on the joint distribution of income, consumption, and wealth with results expected also by the end of 2012.

17.	The IMF to promote timely and cross-country standardized and comparable government finance data based on the accepted international standard, the <i>Government Finance Statistics Manual 2001</i> .	From May 2011, IMF staff reports are adopting a standardized presentation of fiscal data following the <i>Government Finance Statistics</i> <i>Manual, 2001</i> ( <i>GFSM 2001</i> ). Such presentations are beginning to be incorporated in IMF staff reports. In addition, the fiscal data of the IMF World Economic Outlook (WEO) now follows the <i>GFSM 2001</i> format. Among the G-20 economies, seven economies compile quarterly government finance statistics (GFS) based on the <i>GFSM 2001</i> , the same as last year, with two G-20 economies expected to start reporting soon.	IMF staff is finalizing a <i>Government Finance Statistics</i> <i>Compilation Guide for Developing Countries</i> , significantly funded by the UK Department for International Development (DFID). The work program for the <i>Eighth</i> <i>Review of the IMF Data Standards Initiatives</i> , scheduled for the first half of 2012, contemplates dissemination of quarterly general government information and the possibility of strengthening the Data Standards through the possible establishment of a higher tier (SDDS-Plus). The IMF with its IAG partners is developing a common reporting template for GFS data. Once this template is implemented and countries start reporting, this recommendation will be considered completed.
18.	The World Bank, in coordination with the IMF, and consulting with the Inter-Agency Task Force on Finance Statistics, to launch the public sector debt database in 2010.	In December 2010, the World Bank jointly with the IMF launched the quarterly public sector debt database initially primarily for developing and emerging-market countries. Among the G- 20 economies, five provide data to the World Bank for redissemination. The Inter-Agency Task Force on Finance Statistics (TFFS) has published a <i>Public Sector Debt Statistics Guide</i> which provides the methodological guidance for compiling these data.	The TFFS agreed that the World Bank could investigate the possibility of inviting all advanced countries to participate. Before approaching advanced countries, the World Bank is consulting with the OECD, Eurostat, and the ECB to ensure that such an initiative would not duplicate current collections of general and central government debt data. Once coverage is extended and when countries start reporting, this recommendation will be considered completed.
19.	The Inter-Secretariat Working Group on Price Statistics to complete the planned handbook on real estate price indices. The BIS and member central banks to investigate dissemination on the BIS website of publicly available data on real estate prices. The IAG to consider including real estate prices (residential and commercial) in the Principal Global Indicators (PGI) website.	Under the auspice of the Inter-Secretariat Working Group on Price Statistics (ISWGPS), and led by Eurostat, the work on the <i>Handbook</i> on <i>Residential Property Price Indices (RPPI)</i> is well advanced and expected to be completed in late 2011. The BIS, with the assistance of its member central banks (and, in certain cases, also of statistical offices), has started to disseminate real estate price statistics on its website. These data are also available through the PGI website.	The ISWGPS to complete its work on the <i>RPPI</i> on schedule. Thereafter discussion will begin on a <i>Handbook on Commercial Property Price Index</i> . The BIS is working to expand the number of central banks reporting real estate price data for public disclosure.
Comm	nunication of Official Statistics		
20.	The G-20 economies to support enhancement of the Principal Global Indicators (PGI) website, and close the gaps in the availability of their national data. The IAG should consider making longer runs of historical data available.	The PGI website was significantly enhanced in March 2011, when five non-G-20 economies that are FSB members were added, along with cross-country comparable government finance data. Also, the range of ways by which the PGI	During 2011, the high priorities for enhancing the PGI website will be to close gaps in the availability of national data, and improve data timeliness and quality. The bilateral consultations with G-20 economies discussed gaps in data availability; some follow-up discussions to close these gaps

new IPhone and IPad applications, and the release of a Statistical Data and Metadata eXchange (SDMX) web service to facilitate computer-to-computer access. During May 2011, the PGI website was accessed by visitors from over 130 jurisdictions.	are ongoing. Ways of improving the efficiencies in data supply will continue to be investigated, including the continued promotion of the SDMX standards for the dissemination of official statistics. Also, IMF staff intends to investigate integrating the G-20 datasets disseminated on the PGI website with the historical data series underpinning the G-20 Mutual Assessment Process (MAP) exercise. Data-sharing arrangements to be reviewed for the next report from both a supplier and a user perspective.
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#### I. INTRODUCTION

1. In November 2009, the Financial Stability Board (FSB) Secretariat and International Monetary Fund (IMF) staff presented the report *The Financial Crisis and Information Gaps* to the G-20 Finance Ministers and Central Bank Governors. The report, which contained 20 recommendations for closing information gaps (the so-called G-20 Data Gaps Initiative), was endorsed at the meeting. In June 2010, FSB Secretariat and IMF staff reported back on progress, with a concrete plan of action, including a timetable, to address each of the outstanding recommendations. <sup>1</sup> The work on the G-20 Data Gaps Initiative was also endorsed by the IMF International Monetary and Financial Committee (IMFC) at its meetings in 2009, 2010, and, more recently, in April 2011. The G-20 Finance Ministers and Central Bank Governors requested an update by June 2011.

2. The present report responds to this request. It describes the progress to date, the proposed implementation schedule, and the challenges ahead. Moreover, a summary report on the IMF staff bilateral consultations with G-20 national authorities is presented in Annex 1.

3. To ensure that the action plans and timetables were informed by a broad range of expertise, the IMF's Statistics Department (STA) and the FSB Secretariat organized a Conference for Senior Officials (Senior Officials conference) in Washington, D.C., in March 2011, hosted by the IMF. Detailed information on this Conference, including a summary of key points made, is available at <u>http://www.imf.org/external/np/seminars/eng/2011/datagaps.</u> The work has also benefited from consultations and coordination among the members of the Inter-Agency Group on Economic and Financial Statistics (IAG).<sup>2</sup>

4. For ease of reference, Table 2 presents a stylized overview of the 20 recommendations, organized in matrix form. The rows reflect the four main themes highlighted by the global financial crisis as drawn out in previous reports, and the columns reflect their status in terms of whether reporting/conceptual frameworks exist or need to be developed.

5. Many cross-linkages across recommendations, within the same theme, have proved relevant. For example, the recommendations on the cross-border linkages cover the activities of the major players in the international financial markets, the broader international community of banks, and of cross-border security holders; while also the national perspective is covered by the International Investment Position (IIP), and the consolidated cross-border

<sup>&</sup>lt;sup>1</sup> The two reports to the G-20 Finance Ministers and Central Bank Governors are available at <u>http://www.imf.org/external/np/g20/pdf/102909.pdf</u>, for the November 2009 meeting, and <u>www.imf.org/external/np/g20/pdf/053110.pdf</u>, for the June 2010 meeting, respectively.

<sup>&</sup>lt;sup>2</sup> The members of the IAG are the Bank for International Settlements (BIS), the European Central Bank (ECB), Eurostat, the IMF (Chair), the Organisation for Economic Co-operation and Development (OECD), the United Nations Statistics Division (UNSD), and the World Bank.

behavior of national entities. The work has also identified linkages across the themes. For example, the strengthening of data on cross-border activities of banks is expected to support the analysis of maturity mismatches and leverage; and work on improving securities data would help in the development of sectoral accounts.

6. Most notably, through the use of internationally-agreed statistical standards, data on cross-border financial exposures can be linked with the domestic sectoral accounts data to build up a powerful picture of financial interconnections domestically and across borders, with a link back to the real economy through the sectoral accounts. Nonetheless, achieving such a "vision" will take time.

	Conceptual/statistical framework needs development	Conceptual/statistical frameworks exist and ongoing collection needs enhancement
Build up of risk in the financial sector	<ul> <li># 3 (Tail risk in the financial system and variations in distributions of, and concentrations in, activity)</li> <li># 4 (Aggregate Leverage and Maturity Mismatches)</li> <li># 6 (Structured Products)</li> </ul>	<ul> <li># 2 (Financial Soundness Indicators (FSIs))</li> <li># 5 (Credit Default Swaps)</li> <li># 7 (Securities Data)</li> </ul>
Cross-border financial linkages	<ul> <li># 8 and # 9 (Global network connections and systemically important global financial institutions)</li> <li># 13 and # 14 (Financial and Nonfinancial Corporations cross border exposures)</li> </ul>	<ul> <li># 10 and # 11 (International Banking Statistics (IBS) and the Coordinated Portfolio Investment Survey (CPIS))</li> <li># 12 (International Investment Position (IIP))</li> </ul>
Vulnerability of domestic economies to shocks	# 16 (Distributional Information)	<ul> <li># 15 (Sectoral Accounts)</li> <li># 17 (Government Finance Statistics)</li> <li># 18 (Public Sector Debt)</li> <li># 19 (Real Estate Prices)</li> </ul>
Improving communication of official statistics		# 20 (Principal Global Indicators)

Table 2. Stylized Overview of the 20 Recommendations

# II. PROGRESS TO DATE

# A. Progress on the G-20 Recommendations

7. Considerable progress has been made on implementing the 20 recommendations. This progress reflects the impetus given to the G-20 Data Gaps Initiative through the repeated endorsements by the G-20 Finance Ministers and Central Bank Governors and the IMFC, and the willingness of national authorities to positively embrace it, combined with the good institutional arrangements at the international level (both new and established).

8. The progress by recommendation is described in the summary table above (Table 1). Firm progress has been made on a number of fronts.

These include:

- For FSIs (recommendation 2), following the IMF Executive Board's decision to include seven FSIs in the SDDS on an "encouraged" basis <sup>3</sup>—the data reported by seven G-20 economies for these indicators are now available via the IMF's Dissemination Standards Bulletin Board.
- The BIS has completed its initial conceptual work on defining measures of maturity mismatches ("funding gaps") on banks' international balance sheets using the IBS (recommendation 4).
- For CDS (recommendation 5), in late 2009 the CGFS approved changes to data on credit-risk transfer statistics. The first stage of enhanced reporting, starting with end-June 2010 data, is implemented, and the second stage is due to be implemented with the end-June 2011 data. Thereafter, this recommendation will be considered completed.
- The International Organization of Securities Commissions (IOSCO) released a report on ABS Disclosure Principles<sup>4</sup> to guide securities regulators who are developing or reviewing their regulatory disclosure regimes for ABS public offerings and listings (recommendation 6). It created a new Standing Committee on Risk and Research and intends to set up an independent research department to undertake research on systemic risk. Against this background, recommendation 6 is considered completed.
- For debt securities (recommendation 7), the BIS is working with G-20 (and non-G-20) central banks to collect issuance data from national sources based on the conceptual framework and reference tables of the *BIS-ECB-IMF Handbook on*

<sup>&</sup>lt;sup>3</sup> IMF Public Information Notice (PIN) 10/41 of March 23, 2010.

<sup>&</sup>lt;sup>4</sup> <u>http://www.iosco.org/news</u>.

*Securities Statistics (HSS).* Part 2 of the *HSS* (debt securities holdings) has been published, and work has started for Part 3 (equity securities issues and holdings).

- On recommendations 8 and 9, the FSB Working Group on Data Gaps and Systemic Linkages made considerable progress in a complex and sensitive field, producing its final report. The Working Group developed a common draft reporting template to capture the activities of G-SIFIs and made proposals with regard to data access. In April 2011, the FSB Plenary agreed to progress the work on these issues through two work streams. The IMF Executive Board has also discussed progress on these two recommendations.
- On recommendations 10 and 11, the IMF BOPCOM has agreed to increase the frequency (from annual to semi annual) and timeliness (a dissemination lag of less than nine months) of the CPIS. Also, the CGFS Working Group's first set of enhancements to the BIS IBS has been approved by the CGFS.
- For the IIP (recommendation 12), the number of economies reporting quarterly IIP data increased to 64 (an increase of 16 economies from a year ago), including 10 G-20 economies (an increase of two economies from a year ago). This development was given impetus by the IMF Executive Board's decision to prescribe quarterly IIP data reporting under the SDDS (from annual) data, with a maximum lag of one quarter (quarterly timeliness), after a four-year transition period, ending in 2014.
- For government finance statistics (recommendation 17), from May 2011, IMF staff reports have started using the *GFSM 2001* format to present government finance data.
- For general government and public sector debt statistics (recommendation 18), in December 2010 the World Bank, jointly with the IMF, launched a quarterly database, initially primarily for developing and emerging markets. In total, 62 countries agreed to participate, of which 33 have provided data, of which five are G-20 economies. Also, the TFFS has published the *Public Sector Debt Statistics Guide* that provides the methodological guidance for compiling these data.<sup>5</sup>
- For real estate prices (recommendation 19), in August 2010, the BIS started to disseminate available data from its member central banks. The BIS receives residential real estate prices from 14 G-20 economies and commercial real estate prices from one G-20 economy.
- The PGI website (recommendation 20) was expanded in March 2011 to cover data for the five non-G-20 economies that are members of the FSB. Also, cross-country

<sup>&</sup>lt;sup>5</sup> The members of the TFFS are the BIS, the Commonwealth Secretariat, the ECB, Eurostat, IMF (chair), the OECD, the Paris Club Secretariat, the United Nations Conference on Trade and Development (UNCTAD), and the World Bank.

comparable government finance data were added (see <u>www.principalglobalindicators.org</u>).

9. For those recommendations where the conceptual/statistical framework needs development (recommendations 3, 4, 13, 14, and 16), progress in terms of data availability is understandably slower; while for sectoral accounts (recommendation 15), given the scale of the potential data collection, a draft reporting template has been the subject of discussion, with the intention of starting data collection during the coming year.

# B. Consultations With the G-20 National Authorities

10. IMF staff approached all G-20 economies for bilateral consultations, which were undertaken between September 2010 and March 2011. The main themes arising from those consultations are included in Annex 1.

11. Overall, a positive view of the G-20 Data Gaps Initiative was reported, with data to identify the build up of risks in the financial sector and understand financial interconnectedness seen as the highest priorities in many economies. There were also consistent messages that resource constraints exist, that the speed of implementation may vary across economies, that there needs to be consideration of the reporting burden on the private sector and the national authorities, and that the international agencies must cooperate closely.

12. These themes were also broadly reflected in the March 2011 Senior Officials conference which was part of the consultation process. The conference also stressed the importance of consistent and comparable data across G-20 economies, based on internationally-agreed standards, the need for coordination of work across the various recommendations as well as with other G-20 initiatives, and for an ongoing monitoring process of implementation of the actions required to address the data gaps. The conference was also keen to maintain the momentum achieved so far.

13. The key messages from these consultations are reflected in the next two sections of this report.

# **III. IMPLEMENTATION SCHEDULE**

14. The work on implementing the 20 recommendations is well underway. There are some particularly important milestones in the coming 12 months. The milestones in 2011 and the plans through 2014 are set out in Table 3. These include:

• Following a consultation exercise, and further examination of costs and benefits, the FSB Plenary is expected to take decisions in late 2011 on the final form of the G-SIFIs data template and on the initial data confidentiality and access arrangements, following additional preparatory work. The recommendations relating to G-SIFIs

activities are considered to be among the most important of the G-20 Data Gaps Initiative.

- The FSIs Expert Reference Group meeting in November 2011 at which the FSI list will be reviewed and the work on tail risks and leverage in the financial sector discussed.
- The meeting of the IMF's Executive Board in the first half of 2012, at which enhancements to the IMF Data Standards Initiatives, including the possibility of implementing a higher tier (SDDS-Plus), will be discussed. A number of the datasets that are potential candidates for inclusion in such a higher tier are drawn from the G-20 Data Gaps Initiative, supporting public disclosure of financial sector data.
- The development and implementation by international agencies of common templates to collect datasets for which statistical frameworks already exist and whose statistics are interlinked; these include templates for securities, sectoral accounts, and government finance statistics. Also, work to implement common reporting templates for balance of payments and the IIP will take place with the conversion of these data to the new international guidance, the *BPM6*. Over the remainder of 2011, it is expected that agreement will be reached on these common templates among the international agencies in consultation with member countries.

Year	Actions to be taken	Lead Agency(s)
2011 Around mid-year	Report on conceptual work on maturity mismatch and leverage data in the banking and shadow banking system (recommendation 4).	IMF/BIS
	CDS enhancements implemented (recommendation 5). Thereafter, this recommendation will be considered completed.	BIS
	Inventory of sources on cross-border data hyperlinked to the PGI website (recommendation 14).	BIS
	Finalization of a <i>Government Finance Statistics Compilation Guide for Developing Countries</i> (recommendation 17).	IMF
	Investigation into extending coverage of the Public Sector Debt Statistics Database to advanced countries (recommendation 18). Once extended, and when countries start reporting, this recommendation will be considered completed.	World Bank

# Table 3. Schedule of G-20 Data Gaps Initiative: Key Milestones Ahead 67

<sup>&</sup>lt;sup>6</sup> This table gives an overview of the milestones related to the G-20 Data Gaps Initiative expected over the next three years as can be best judged at this time. The table focuses on milestones for which there is a reasonable probability that action will be taken and does not include possible actions that are dependent on decisions yet to be taken.

<sup>&</sup>lt;sup>7</sup> The figure in brackets refers to the recommendation(s) involved.

	Decision to launch work on developing a Commercial Real Estate Prices Handbook (recommendation 19).	Eurostat
Later in 2011	FSIs Reference Expert Group meeting (recommendations 2, 3, and 4).	IMF
	Complete Part 3 of the <i>Handbook on Securities Statistics</i> (issues and holdings of equity securities) and data collection for G-20 economies; agreement on the enhanced securities templates (recommendation 7).	BIS, ECB, IMF
	FSB Plenary decision on the common template and initial data-sharing arrangements for G-SIFIs (recommendations 8 and 9).	FSB
	CGFS working group and the second set of enhancements to the BIS IBS (recommendations 10 and 11).	BIS
	Agreement on the new IIP and balance of payments report forms to implement <i>BPM6</i> (recommendation 12).	IMF
	Agreement on the sectoral accounts templates; hyperlink available sectoral accounts data to the PGI (recommendation 15).	IMF, OECD
	Agreement on the government finance statistics common reporting template for use by international agencies (recommendation 17). Once this template is implemented and countries start reporting, this recommendation will be considered completed.	IMF
	Handbook on Residential Real Estate Prices to be finalized (recommendation 19).	Eurostat
2012 First half	<i>Eighth Review of the IMF Data Standards Initiatives</i> (recommendations 2, 10, 11, 15, 17, and 19, and perhaps 9).	IMF
2012 Second half	FSB Plenary and the second phase of the work on G-SIFIs (recommendations 8 and 9).	FSB
	First set of IBS enhancements implemented (recommendations 10 and 11).	BIS
	First part of the documentation on consolidation (recommendation 13).	BIS
	Results from the two groups investigating the measurement disparities in a national accounts framework (micro-macro); and joint distribution of income, consumption, and wealth (recommendation 16).	OECD, Eurosta
2013	CPIS enhancements implemented (recommendations 10 and 11).	IMF
2014	Dissemination of quarterly IIP data by all SDDS subscribers (recommendation 12).	IMF

15. Further, a number of national authorities pointed out that the 20 recommendations should not be seen as mutually exclusive. Indeed, there are considerable interlinkages among recommendations that can create synergies in implementation.

16. For instance, the BIS IBS datasets have a close link with the template proposed by the FSB Working Group for the G-SIFIs. Consequently, the Secretariats of the CGFS and FSB

Working Groups are liaising closely to ensure that the industry consultation is as smooth as reasonably possible. The consultation on the BIS IBS datasets started in early June 2011. Furthermore, the work on maturity mismatches and leverage for banks also relies on the BIS IBS data and so further progress on recommendation 4 may be expected when the new enhanced IBS data become available.

17. The concepts behind the IBS consolidated data could also provide the methodology for the consolidated data for nonbank financial corporations and nonfinancial corporations (recommendation 13), and hence the BIS leads the work and hosted the January 2011 workshop on this issue.<sup>8</sup> The work on the consolidation concepts for the G-SIFIs data templates could have implications for the methodological work on recommendation 13 and for the work on FSIs (recommendation 2).

18. For the national accounts-based datasets, the centerpiece of the work is the development of the sectoral accounts. A number of the other recommendations are related to recommendation 15: these include the recommendations relating to the IIP (recommendation 12), government finance statistics (recommendation 17), and securities statistics (recommendation 7). All of these other recommendations will help to enhance the sectoral accounts data.

19. In addition to recommendation 15, the work on securities data can support the work on the recommendations on the CPIS (recommendations 10 and 11), the IIP, government finance statistics, and public sector debt data (recommendation 18), because these recommendations have a securities data component. The templates for government finance statistics are consistent with those developed and used in the public sector debt database. Indeed, all the common templates being developed and referred to above have instrument and sector classifications consistent with the *2008 SNA*.

20. In 2011, the international agencies, working in cooperation through the IAG, in consultation with G-20 member economies, and through the relevant statistical committees, intend to develop harmonized and consistent reporting for sectoral accounts, government finance, securities, and external data, as described in paragraph 14, based on the *2008 SNA*; agree on modalities for the organized data flow and data quality management among the international agencies; and work towards presenting these harmonized data on the PGI website. As a consequence intersectoral consistency of data will be promoted, enhancing analytical usefulness and reducing compliance costs for data providers. Annex 2 sets out in tabular form the relationship between the sectoral accounts and those for government, monetary and financial, securities, and external datasets.

<sup>&</sup>lt;sup>8</sup> The paper prepared for the meeting discussed a variety of consolidation methods including those used in commercial accounting and for financial supervision.

21. Finally, the recent crisis has seen pressure on some statistical agencies to increase the timeliness of the data provided to policymakers and the public. The need for timely information is recognized, while preserving data quality.

#### IV. CHALLENGES AND INSTITUTIONAL ARRANGEMENTS

22. During the bilateral consultations with G-20 national authorities, including at the Senior Officials conference, a number of challenges were identified in implementing the G-20 Data Gaps Initiative. Some of these challenges had been identified in the May 2010 Progress Report, but as the recommendations begin to be turned into concrete and practical actions, the challenges have become clearer. This section sets out the main challenges identified and reviews the institutional arrangements for the work ahead.

# A. Resources

23. In an environment of budget stringency in many economies, the resources needed to implement the G-20 Data Gaps Initiative are inevitably an issue. Overall, the initiative does add mainly to the work load of compilers. Nonetheless, it was recognized at the Senior Officials conference that the recent events had demonstrated the need to strengthen the data infrastructure as the cost of not having the relevant information proved to be high.

24. Resource allocation decisions are the responsibility of the national authorities and national priorities vary. Also, different economies face differing circumstances and this will affect their decisions on resource allocation. Nonetheless, some ideas for easing the burden were raised, with potential implications for both national and international agencies.

25. From a national perspective, it may be necessary to consider if the data coverage of more traditional areas of the economy that are in relative decline could be reduced to make way for improved data on emerging priority areas. Second, effective coordination across national agencies with responsibility for statistical work was considered essential to keep down costs. The evidence from the bilateral consultations is that domestic agencies are increasing their cooperation. This trend should be encouraged. Third, adherence to internationally-agreed standards, particularly those based on the *System of National Accounts* (*SNA*), brings analytical benefits, and allows data to be compared across borders. Importantly from a resource perspective, this can reduce costs by allowing data collected for one purpose to be used for other related datasets. This is the mirror image of the discussion above on interlinkages across the various initiatives.

26. There was also a call from national authorities for strengthening domestic coordination among national statistical agencies/parties responsible for work in macroprudential statistics and for international agencies to reduce the duplication of data requests. Many countries raised concerns about similar datasets being required by different international agencies, or even by multiple users in the same international agency, meaning that national compilers maintain multiple sets of data that are essentially the same. Also, the

G-20 Data Gaps Initiative should be coordinated with other G-20 initiatives that involve the provision of data. In this regard, many national authorities encouraged international agencies to ensure that, to the extent possible, data requests are consistent with international standards. This is particularly relevant for exercises like the G-20 MAP that compares data across G-20 economies.

27. Also, some national authorities emphasized the need to integrate the G-20 Data Gaps Initiative to the extent possible with the implementation schedule of the new international statistical manuals, particularly the 2008 SNA and the BPM6. For this reason the implementation of the sectoral accounts is concurrent with the timetable for the countries' implementation of the 2008 SNA; and the implementation of CPIS is scheduled for 2013, when many economies will have completed implementing or be close to implementing the BPM6.

28. Finally, national authorities stressed the need for the G-20 Data Gaps Initiative to build in flexibility in the timetables for implementation to reflect differing national circumstances and priorities. As a broad statement, emerging economies are likely to need a longer lead time for some of the recommendations than advanced economies. Also, all recommendations are not necessarily relevant for all economies—for instance the recommendation on CDS is relevant for those economies with significant markets in these instruments.

29. On balance, there was a consensus that to implement the G-20 Data Gaps Initiative additional resources are likely to be required for statistical functions. G-20 Finance Ministers and Central Bank Governors are thus encouraged to support an increase in human and financial resources to address data gaps revealed by the global crisis.

30. From the international perspective, the international agencies have committed to foster common reporting templates, consistent with international standards, across a range of statistical domains. As described above, the vision of the members of the IAG is that data are supplied through SDMX to one international agency that provides those data to the other international agencies that have an interest in the dataset. This would have the benefit of speeding up the delivery of data, and remove inconsistencies due to different sources of data while keeping down the costs on national and international agencies.

31. In this context the work on the G-SIFIs template, and the agreement to establish a single data hub, is setting an example in minimizing reporting burdens because the data will be collected only once to the benefit of supervisors and macroprudential authorities at a national and international level. This can be contrasted with an alternative of each international agency collecting data for their own purposes. But it will need to be underpinned by strong governance arrangements that support both the confidentiality of sensitive data and provide appropriate access.

32. Concern over the potential burden on reporting agents was raised. The ideas mentioned above to reduce costs of the national compiling agencies, along with well-structured and justified requests for data, would help keep down the compliance burden on reporting agents.<sup>9</sup>

# **B.** Priorities and Interlinkages

33. The need to identify the priority areas of work in the G-20 Data Gaps Initiative was stressed in discussions with G-20 national authorities. Indeed, while national authorities had their own views on priorities, there was a broad degree of consensus.

34. Overall, the impression gained is that strengthening data on the financial sector, including shadow banking, financial interconnectedness, and sectoral balance sheets in particular were considered high priorities. Also, in a number of economies there is work being undertaken to improve real estate price information. Areas such as government finance statistics were also considered important but significant challenges in some economies to compiling frequent and timely general government data were recognized.

35. The potential synergies across recommendations were also noted, encouraging the joint implementation of related recommendations. In this regard, early specification of reporting requirements supports the integrated implementation of the recommendations. This need is recognized in the implementation schedule, and in a number of key milestones.

36. Further, national authorities acknowledged that some of the recommendations represent work in an "experimental/conceptual" phase that may not require the provision of data for some time. These recommendations, notwithstanding the importance of making progress in conceptual development, are viewed as having lower priority, at this stage, in terms of data collection than others. Among those in the conceptual phase are recommendation 4 (on the maturity mismatches and leverage), and recommendations 13 and 14 (cross-border consolidated data for financial and nonfinancial corporations). For recommendation 14, the intention is to utilize existing datasets as far as possible, including the OECD's statistical exercises on nonbank financial institutions.

37. At the Senior Officials conference, participants stressed the importance of keeping close communication between the statistical functions and policymakers to understand the priorities attributed by the latter to various datasets.

<sup>&</sup>lt;sup>9</sup> In April 2011, a letter from financial sector associations to the G-20 Ministers of Finance and Central Bank Governors called for the G-20 to support the creation of a "legal entity identifier (LEI)." Such an identifier would provide an internationally recognized data standard for the identification of legal entities engaged in financial transactions. By promoting the accurate identification of legal entities engaged in financial transactions, an LEI would support improved data reporting. The development of an LEI involves a coordinated global solution that is currently emerging.

#### C. Data Access

38. The emergence of macroprudential analysis both nationally and internationally has raised some important questions. This includes the scope and objective of both national and global macroprudential surveillance, and the broad governance issue for data access. Macroprudential analysis draws on both micro and macro datasets, as macroprudential analysis is as much about the tail risks within averages as well as the averages themselves.

39. The G-20 Data Gaps Initiative is bringing together a wider range of participants. For example, the FSB Working Group that developed the G-SIFIs common draft template brought together supervisors, statisticians, and macroprudential experts. Also, the consultations with G-20 economies have involved not only central banks and statistical agencies, but also the finance ministries and supervisory agencies.

40. A crucial question relates to potential access to data. To undertake macroprudential analysis, including developing network models to understand the transmission channels, tail risks and emerging vulnerabilities in the system, access to more granular data is essential. Financial data disaggregated by country, sector, instrument, maturity, and currency denomination would facilitate the identification of interest rate and exchange-rate risks, maturity mismatches or funding gaps, and the potential for spillovers across sectors and across borders. The G-20 recommendations regarding the BIS IBS and IMF CPIS datasets and the emerging G-SIFIs template to varying degrees include such breakdowns. Indeed, the IMF's Executive Board recently underscored the need for granular data to support analysis of financial interconnectedness at the international level, as well as at the national levels.<sup>10</sup>

41. Such a need for data access raises issues of confidentiality of data for supervisors and statisticians. More granular data potentially raises concerns over confidentiality. Policymakers need to balance financial stability objectives that warrant detailed data access against confidentiality concerns. To the extent national laws do not adequately address the balance between confidentiality and data access in the post global crisis environment, authorities may need to consider revising such laws.

42. Further, national authorities may need to review their legal frameworks in order to enable them to collect additional data to support the improved assessment of system-wide risks and thus to enhance the development and implementation of macroprudential policies. That may require enhancements to legal frameworks in some cases to provide the authorities with the appropriate data-collection powers across the whole of the financial system. For any newly developed BIS and IMF reporting frameworks to be effective, a strengthening of legal frameworks for data collection might be necessary in some countries. In addition, the

<sup>&</sup>lt;sup>10</sup> See IMF PIN No. 11/61 of May 25, 2011.

authorities may take further actions to support enhanced public disclosures by financial firms, including in the context of the Basel Accords.<sup>11</sup>

43. It is proposed that the next report discusses in more detail progress on data sharing both from the supplier (such as progress on implementing common reporting templates for macroeconomic data) and the user perspective, in consultation with G-20 economies and IAG members.

# **D.** International Coordination

44. The institutional structure that was developed to take forward the G-20 Data Gaps Initiative has proved effective in coordinating the work at the international level, not least to leverage resources and minimize costs.

45. Lead agencies have been appointed to take responsibility for individual recommendations. Staff from the IMF and the FSB Secretariat have cooperated closely in overseeing the whole program, and provided annual updates on progress to the G-20 Finance Ministers and Central Bank Governors.

46. Most of the coordination work has been undertaken through the IAG, with the existing relevant bodies, such as the BOPCOM, the FSB, and the CGFS taking the decisions for the datasets under their responsibility. The meetings of senior officials have also proved effective in bringing the "big picture" ideas, issues, and priorities in advance of the reports to the G-20 Finance Ministers and Central Bank Governors.

47. In taking forward the full range of G-20 recommendations, it is important to recognize that the coordination effort has also comprised central banks (statistical departments and financial stability departments), national institutes of statistics, ministries of finance, supervisory agencies, and international macroprudential authorities. Furthermore, this coordination work facilitates comparison of data across G-20 economies.

48. One new international governance issue that was raised at the Senior Officials conference was that there should be ongoing global monitoring of the progress G-20 economies are making in implementing the G-20 Data Gaps Initiative. The IMF will consider setting up procedures to support this. One suggestion was for the IMF to ask G-20 economies to undertake self assessments to update the detailed information from the G-20 bilateral consultations. This monitoring could be achieved through a standardized template.

49. Further, IMF staff intends to investigate integrating the G-20 datasets disseminated on the PGI website with the historical data series underpinning the G-20 MAP exercise.

<sup>&</sup>lt;sup>11</sup> For instance, the need to publicly disclose information is part of the requirements of Pillar 3 (Market Discipline) of the Basel II Accord for banks.

# V. WAY FORWARD

50. Table 1, following the Executive Summary, reports on progress and the proposed work program going forward for implementing the G-20 Data Gaps Initiative.

51. This report asks for the endorsement by the G-20 Finance Ministers and Central Bank Governors of these proposed action plans and timetables.

### Annex 1. Summary of Main Themes from the Consultations with G-20 Economies

*The Financial Crisis and Information Gaps: Progress Report, Action Plans, and Timetables (May 2010),* was presented to and endorsed by the G-20 Finance Ministers and Central Bank Governors in June 2010. It envisaged that IMF staff would consult with the authorities on the challenges, resource implications, and reporting involved in implementing the action plans set out in the noted progress report. IMF staff undertook bilateral consultations with G-20 economies during the period September 2010 to March 2011, including at a Senior Officials conference on March 30–31, 2011 at IMF Headquarters.

The discussions focused on two aspects: the main data gaps identified by the national authorities; and a discussion of the specific recommendations, distinguishing between:

- Those recommendations for which the conceptual/statistical framework needs development, and
- Those recommendations for which conceptual/statistical frameworks exist and ongoing collection needs enhancement.

IMF staff described the ongoing progress being made by the international community on the first set of recommendations and, in advance of the consultations, identified for the second set the current reporting practices of each economy consulted.

From these discussions came a clear view of the priorities, cross-cutting problems, and challenges that the G-20 economies face in addressing data gaps.

# I. THE DATA GAPS

#### A. Summary Views

Consulted authorities welcomed and expressed strong support to the G-20 Data Gaps Initiative and, in particular they:

- Welcomed the opportunity to engage in a dialogue with IMF staff on the G-20 Data Gaps recommendations;
- Saw the initiative as a means to strengthen the availability of critical data across sectors and countries; and
- Pointed out the need to push this work forward, tackle the difficult issues, and find ways to ensure progress is monitored in the implementation of the recommendations at the country level.

While there was broad agreement that the data gaps identified in the G-20 Data Gaps Initiative were appropriate, the relevance of the G-20 recommendations varies across

countries. This reflects differences in the impact and nature of the global crisis and in quality dimensions (including coverage, scope, timeliness, frequency, accessibility, and communication) of existing datasets. As a result, national authorities considered that action plans and timeframes to address data gaps need to be flexible and pragmatic, recognizing:

- The conditions and capacities in different countries; and
- Cost/benefit trade-offs.

Recognizing the interlinkages across the G-20 recommendations, consulted authorities underscored the need to make parallel progress in the implementation of the recently updated statistical methodologies, namely: the *2008 SNA*, the *BPM6*, and the *GFSM 2001*.

Moreover, it was considered important to improve the analysis of existing data and recognize that more data may not always be the best answer.

# **B.** Emerging Common Priorities

There was a large degree of consensus over the main data gaps: those related to financial interconnectedness (domestic and cross-border), and the build up of risk in the financial sector more generally, including shadow banking.

#### **Cross-border financial interconnectedness**

A widespread conclusion among national authorities was that the global crisis had highlighted the importance of obtaining a better understanding of the interconnections between domestic and foreign entities, and the nature of financial networks more broadly.

National authorities see a need to better understand the interlinkages among banks, sectors, and countries. This leads to strong support for such existing internationally coordinated exercises such as the BIS IBS and the CPIS, and also for the new work on G-SIFIs. On the latter, the nature of the policy interest varies, not least depending upon whether the G-20 economy in question is a home supervisor of a G-SIFI or not, but encompasses understanding:

- The financial networks in which G-SIFIs operate;
- Their impact on domestic markets and economies; and
- The linkages between global, regional, and national SIFIs.

This interest is heightened by the growing concentration of financial activity in large financial institutions. The need is primarily for information on G-SIFIs exposures and funding behaviors.

Further, for some economies, improving information on cross-border exposures between offshore financial entities and domestic nonfinancial corporations is also important.

# **Domestic financial interconnectedness**

Many G-20 economies consulted gave a high priority to improving sectoral accounts, particularly sectoral balance-sheet data. Such data helps better understand financial connections within the economy, real and financial linkages, and the role played by nonbank financial institutions in the financial sector. Also, as one country authority described, "while flows provide a snapshot of developments in the past, balance-sheet data provide a better guide to future developments, as stock data represent cumulative developments."

# **Financial sector**

The importance of improving the data available on nonbank financial institutions was recognized to better understand their role in the financial system. In a number of countries, these institutions are growing in importance, and the balance of systemic relevance between bank and nonbank financial institutions can shift over time. For instance, new or strengthened regulations on the formal banking system could push more financial intermediation activity into the shadow banking system, absent further policy action to offset this.

Further, there is a need to gain a better understanding of tail risks, maturity mismatches and leverage, both in banking and shadow banking, to help identify the build up of risk in the financial system as a whole. These were recognized as complex but vital issues to address. Better use of data to identify asset bubbles was noted by some consulted.

Some economies also are giving priority to enhancing their data on FSIs.

# **Real estate prices**

Given the role of real estate markets in the recent global crisis and the relevance of mortgage debt in many economies, developing and/or strengthening data on real estate (residential and commercial) prices, along with making these data available to concerned parties, was identified as a priority going forward. The consultations revealed that there is an ongoing and significant effort in many economies to improve the availability and quality of residential real estate price indices. Development of appropriate commercial property price indices is also seen as important for financial stability analysis, but this work lags behind that for residential real estate.

#### **Government finance statistics**

The need to upgrade fiscal data was recognized in a number of economies. This includes the development of accrual-based data to get a better handle on resources flows, coverage to include state and local government, and timeliness and frequency. However, this work involves a significant commitment by the authorities because of the need to change IT systems and the wide range of government entities that exist in some economies. In some economies these enhancements are linked to a broader public policy of improving transparency.

# C. Other Related Issues

#### Data communication/transparency

Timely, comprehensive, and comparable data with user-friendly metadata are instrumental to the success of the G-20 Data Gaps Initiative. In this connection, the PGI website was welcomed and considered an excellent example of cooperation among international institutions involved in statistical work. Longer and more homogeneous (cross-country comparable) time series are desirable, and could be linked with the historical data underlying the G-20 MAP exercise.

Some economies saw a need to improve their communication with data users.

#### Data access

While it was recognized that macroprudential analysis needs could lead to increased pressures for data sharing, significant legal challenges are foreseen with the sharing of confidential information. This applies both among domestic institutions and across border. This is particularly relevant with regard to data for G-SIFIs. While some economies saw confidentiality restrictions as an important challenge to overcome, and practices varied across economies, it was widely recognized that better data access and sharing would not be easily achieved and may require changes to existing legal frameworks in some jurisdictions.

#### Resources

As budgetary constraints exist, consulted authorities noted that adequate resources would need to be identified and allocated to statistical work to ensure progress. Resource constraints are a reality that could slow down new tasks to address data gaps or could stop ongoing work programs, which is cause for concern. In any event, resource considerations play an important role in determining implementation timelines for the various recommendations and draw attention to cost/benefit trade-offs.

In addition to the costs incurred by public agencies, private reporting entities are also subject to considerable compliance costs. These costs would need to be taken into due consideration.

#### **Domestic coordination**

Many economies raised the subject of coordination among domestic statistical agencies. There appears to have been a growing awareness of the need to coordinate and while practice varies considerably across economies, the impression left by the consultations was that coordination among national agencies involved in economic and financial data appears to have improved in recent years.

This is being supported by strengthened institutional arrangements for macroprudential/ financial stability analysis—these include the establishment of the Office of Financial Research (OFR) in the United States, new departments responsible for financial stability analysis at the Deutsche Bundesbank, and interagency coordinating arrangements in India, among others. Nonetheless, coordination of multiple national agencies involved in statistical work remains a challenge.

The importance of also strengthening the relationship between policymakers and statisticians was stressed at the Senior Officials conference.

#### **International agencies**

The bilateral consultations raised many issues with regard to international agencies.

Better coordination among international agencies is encouraged. In this connection, the establishment of the IAG is a major step forward, and further efforts should be made building on the positive experiences of the IAG and the PGI website. Data compilation templates could be revamped so that the same information is collected once to avoid duplication of effort, and publicly available data should be harvested as much as possible.

Further, there are various interrelated work streams that cut across the 20 recommendations and the implementation of certain recommendations overlaps with other international initiatives, e.g., external accounts and the *BPM6*.

Data-sharing arrangements among various international agencies could be improved and their work programs be better integrated, including to minimize differences in estimates across international agencies so as to provide users with consistent datasets. Moreover, other G-20 initiatives that involve the provision of data could be better connected to the G-20 Data Gaps Initiative.

Frequent changes to questionnaires requested by international institutions have significant resource implications for official institutions and reporting private entities, not least because they result in changes in coding systems and increased IT costs. Hence, questionnaires should be modified infrequently.

At the same time, there is a need to address the link between the recommendations being coordinated by the IAG and their actual implementation at the country level where these recommendations are not legally binding, which may lead to uneven progress.

# II. RECOMMENDATIONS FOR WHICH CONCEPTUAL/STATISTICAL FRAMEWORKS EXIST

This section summarizes the main messages from the bilateral consultations with regard to the recommendations for which conceptual/statistical frameworks exist.

# Recommendation 2: Financial Soundness Indicators (FSIs)

FSIs are a relatively new dataset with regular reporting to the IMF starting in 2009. The consultations revealed that economies are continuing in their efforts to improve the availability of FSI data. One G-20 economy does not provide FSI data for redissemination by the IMF.

Increasingly most of the core FSIs are compiled and disseminated, although a number of economies do not disseminate data on the net open foreign exchange position. Among the encouraged FSIs, the best coverage is for deposit takers. Gaps in nonbank financial institutions coverage were noted by some. The frequency of the reported FSI data varies from economy to economy and by type of institutions covered. Data for deposit takers are invariably the most frequent, and data may be available on a monthly, quarterly, semi-annual, and annual basis. There is a trend towards increasing frequency, such as moving to quarterly reporting. Currently, 10 G-20 economies report data on deposit takers' FSIs to the IMF for redissemination either monthly or quarterly. During the consultations, some economies expressed a willingness to compile more FSIs with higher frequency.

There is an interest in providing historical data, back to the mid-2000s or earlier. But a concern about data quality can restrict further historical data. Some economies indicated that lack of resources, a reliance on existing supervisory surveys not designed for compiling FSIs, and a lack of appropriate source data, as hampering their efforts to improve FSIs coverage and frequency of dissemination.

# Recommendation 5: Credit Default Swaps (CDS)

The subset of G-20 economies, covering financial centers that are home to the most important institutions active in CDS markets, report the semi-annual CDS data to the BIS. Overall there is good coverage. There was general confidence that the central banks would be able to meet the deadline for the new enhanced data which will be adopted in June 2011.

# **Recommendation 7: Securities Data**

Many of the G-20 economies participate in the review group on the *Handbook on Securities Statistics* and this has helped focus attention on the need for these data. Also, during the

consultations it was acknowledged that the BIS is working very actively with G-20 countries to report securities data.

While a few G-20 economies have good coverage, there is some way to go in many G-20 countries, and there are a number of challenges. These challenges include developing systems to collect and compile the underlying data, with some considering moving to a security-by-security system to support this work; coordination among different agencies, such as the central bank and the securities regulator; improving the coverage and detail of data such as widening from the government securities to the broader private sector and from domestic currency to foreign currency; and increasing frequency, with some G-20 economies providing annual data but looking into the possibility of reporting quarterly data.

While there is general recognition of the importance of securities data, not least because the data can be used in a wide range of datasets, the priority given to this work varies across G-20 economies.

# Recommendations 10 and 11: International Banking Statistics (IBS)

Most G-20 economies provide IBS data to the BIS. Those G-20 economies that do not report, are considering reporting, and are in discussions with the BIS. While no decisions have been made, the impression gained in the bilateral consultations was that there is interest in looking into the possibility of joining the BIS survey.

Among countries that do participate, the general standard of reporting is good. In a number of economies, work is ongoing to close gaps, and in some instances reduce the level of unallocated data. The bilateral consultations helped focus attention on these issues.

Not all economies reporting locational data also report consolidated data, which is understandable since not all countries have globally active banks with significant international exposures. Moreover, within those reporting consolidated data fewer economies provide data on an ultimate risk basis than on an immediate borrower basis. Some economies that do not provide consolidated data are looking into the possibility of supplying these data, but others are not, as they did not see this dataset as a priority. Confidentiality remains an issue in some instances, particularly where international banking activity is concentrated in a few active banks.

During the consultations, central banks were fully aware and generally supportive of the discussions on potential enhancements to the IBS data, and are working closely with the BIS to see what is achievable at reasonable cost.

#### Recommendations 10 and 11: Coordinated Portfolio Investment Survey (CPIS)

The CPIS is a long-established survey of portfolio assets on a from-whom to-whom basis, in which 18 of the G-20 economies participate. While no decisions have been made, the

impression gained in the bilateral consultations is that there is interest among the nonreporting economies in the possibility of joining the CPIS survey.

The bilateral consultations revealed that in many economies there is work underway to increase the frequency of reporting of data on bilateral cross-border security positions, reflecting the growing interest in cross-border financial interconnections. For this reason, there was support for moving to semi-annual data collection and for a reduction in the reporting time lag. Indeed, there were strong arguments made that the survey should move to quarterly reporting with the intent of integrating the CPIS with quarterly IIP reporting. Others cautioned that action plans and timeframes for the proposed enhancements need to be flexible and pragmatic, recognizing in particular the resource implications of modifying existing data collection systems.

Among the CPIS participating economies, the general standard of reporting is good. In some economies, work is ongoing to extend the scope of data coverage by reporting encouraged breakdowns, such as the currency composition of portfolio investment assets and the sectoral information. However, while recognizing the relevance of such data, it was cautioned that the more sectoral information requested the greater confidentiality and perhaps data quality concerns are likely to arise. There were requests that the IMF staff presents prototypes of the proposed new data reporting forms and dissemination tables to allow for an in-country analysis of the impact of the proposed enhancements to the scope of the CPIS.

# Recommendation 12: International Investment Position (IIP)

With the impetus of the decision to prescribe IIP on a quarterly frequency in the SDDS effective in 2014, six of the 10 G-20 economies not currently reporting quarterly IIP data to the IMF/STA indicated a timeframe for implementing quarterly dissemination ranging from 2011 to 2014. There was a call to share international experiences, and, in this regard, the pamphlet, published by IMF staff in March 2011 to assist statistical agencies and central banks in compiling and disseminating quarterly IIP data, was welcomed. Also, it was noted that in preparing quarterly data, some degree of estimation might be needed.

#### **Recommendation 15: Sectoral Accounts**

The discussion with G-20 economies on balance-sheet, flow-of-funds, and sectoral accounts was positive in tone as many economies noted the relevance of such information for timely policy responses. In particular, countries highlighted that balance-sheet and flow-of-funds data were important for analyzing the build-up and transfer of risk across sectoral boundaries. But the scale of the challenge was recognized given the broad range of institutions, instruments, stocks, and flows to be covered and integrated.

Some specific challenges were identified: the difficulty in integrating financial and nonfinancial accounts, which may be compiled by different agencies; the problems in adequately covering the activities of households and nonfinancial corporations; the

measurement challenges in developing sectoral data on nonfinancial assets, within which valuation of land and dwellings was seen as a crucial element; and the need to improve coverage of the nonbank financial sector to understand the vulnerability of this sector and links to the economy as a whole.

While a number of economies noted they have limited balance-sheet and sectoral data at present, there was broad consensus that setting out a work program and priorities would assist in progressing this work alongside implementation of the *2008 SNA*. There was also support within economies to coordinate among different agencies, such as the central bank and the statistical office, to produce a comprehensive set of sectoral accounts.

#### Recommendation 17: Government Finance Statistics (GFS)

While the bilateral consultations revealed that most G-20 economies are planning to enhance their GFS, many difficulties exist in compiling quarterly GFS data for general government consistent with the *GFSM 2001*. These include ensuring coverage of, and timely reporting from, state and local governments, which in many instances requires political support as well as technical support, such as upgrading IT systems and training staff; access to quarterly data for social security funds; and compiling data on an accrual basis when many systems rely on cash reporting. Also, in many instances, data on stocks needs to be enhanced.

While 13 of the G-20 economies compile GFS for the general government, from the bilateral consultations problems were identified regarding coverage, periodicity, and timeliness. Four economies compile data on general government operations or cash-flow statement within one quarter after the end of the reference quarter. Three economies compile data on general government financial balance sheet within one quarter after the end of the reference quarter. Some economies informed that they have yet to change budget data into the *GFSM* presentation.

Many authorities are in the process of implementing improvements to their government finance statistics, with some passing laws to ensure that state and local governments report in a timely and standardized manner.

# **Recommendation 18: Public Sector Debt**

Most of those G-20 economies that had not yet been invited to participate in the World Bank Public Sector Debt Statistics database were willing to consider the possibility. As it was noted that the OECD collects debt data, the importance of coordinating data requests across international agencies was stressed.

#### **Recommendation 19: Real Estate Prices**

The bilateral consultations revealed that work is under way in a number of G-20 economies to improve the availability and quality of real estate prices because of the relevance of these data for macroprudential policy analysis. In particular, countries were interested in understanding housing wealth trends so as to assess the build up of risks and vulnerabilities in this sector, with potential wider economic and financial implications.

Support was shown by countries for the development of comparable data on real estate price indices. Areas of interest include the valuation of residential land and dwellings, and the value of commercial real estate. The discussions also raised the importance of collecting price data on existing and new real estate, and the ability to differentiate between houses and apartments. A number of countries also noted interest in analyzing capital city and regional price trends.

While the current compilation practices vary across countries, there was broad consensus that the work to finalize the *Handbook on Residential Property Price Indices* in late 2011 would be of assistance. There was also support for discussions to be held with private sector vendors so as to ensure that quality of reporting is achieved.

#### Recommendation 20: Principal Global Indicators (PGI)

During the bilateral consultations with the G-20 economies, the national authorities welcomed the PGI website. These consultations provided the opportunity to address some of the data gaps in the PGI. Among them is the fact that real effective exchange rates (REER) are not disseminated for all G-20 economies, while the data are generally available at the IMF. However, contrary to other data in the PGI, REER are calculated by the IMF rather than being reported by countries. Permission was sought from G-20 economies that had not previously authorized the dissemination of these data, allowing expansion of the country coverage for these important indicators. The consultations also covered plans to report data that are currently not available on the PGI, such as data on general government.

Many countries observed that the PGI data are not as timely as the data available on the national authorities' website. To appear on the PGI, data must first be reported to PGI-contributing agencies, mostly the IMF since a large share of PGI data are sourced from the IMF's *International Financial Statistics (IFS)*. The IMF is discussing with partner agencies how to address this issue.

Some economies encouraged the IMF to further rely on the SDMX standards for the exchange of data with countries to enhance timeliness of the data. Almost all G-20 economies are SDDS subscribers and, when indicating timeliness issues for PGI, they referred to the more timely data available on the SDDS-mandated National Summary Data Page (NSDP). In response to these observations, the IMF is now investigating modifying the format of the NSDP to align it with the format of the SDMX standards. This will make the

NSDP fully computer-readable and help address the timeliness issue of the PGI. This change will require active consultation with the SDDS subscribers and is expected to take some months before being completed.

There were suggestions to broaden the scope of PGI to include other important datasets. In the short term, these suggestions were addressed by providing links to more data sources from the "Additional Data Sources" tab on the PGI website.

#### Annex 2. Interlinkages Between the Sectoral Accounts and Related Datasets

The 2008 SNA provides the core framework for the recording of residence-based statistics. Its main features refer to the definition of institutional units and sectors, the distinction between positions, transactions and other flows, the general concept of market valuation, and the quadruple entry principle.

This annex presents in a synoptic matrix the interlinkages between the G-20 Data Gaps Initiative recommendations that draw on the conceptual framework of the *2008 SNA*. These are security statistics (Recommendation 7), the IIP (Recommendation 12), sectoral accounts (Recommendation 15), and government finance statistics (Recommendation 17). The matrix uses the financial account/financial balance sheet of the *SNA* integrated sector accounts as the organizing framework.

As illustrated in the matrix, the *SNA* provides a unifying framework for the other standards flowing from it (the monetary and financial statistics, securities statistics, the IIP, and government finance statistics). The matrix can be populated drawing from existing related datasets in a cohesive and structured fashion to support a wide variety of analytical purposes.

The development of harmonized and consistent reporting of sectoral accounts, government finance statistics, securities and external data, as described in paragraph 20, is to be based on the framework presented in the matrix.

# Table 4: Interlinkages Between Rec #15 and Recs #7, #12, and #17 as Reflected in the Financial Account/Financial Balance Sheet of the SNA Integrated Sector Accounts Part of a system of institutional sector accounts (financial account and financial balance sheet)

		Residents														Nonresidents					All creditors											
Creditor by residency and resident sector			Nonfinancial corporations					F	Financial corporations and subsectors					General government					Households and nonprofit institutions serving households													
Debtor by and by fi	Debtor by residency and resident sector and by financial instrument				1																											
			SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS <sup>1/</sup>	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS III	P MFS	
		Monetary gold and SDRs																														
		Currency and deposits*	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$		1		
		Debt securities	$\checkmark$		✓			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$		
	Nonfinancial	Loans	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$		1		
	corporations	Equity and investment fund shares or units	$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		~		
		Insurance, pension, and standardized guarantee schemes																$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
		Financial derivatives and employee stock options	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
		Other accounts receivable/ payable	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
	Financial corporations and sub-sectors	Monetary gold and SDRs																					$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
		Currency and deposits	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
l		Debt securities	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
		Loans	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
		Equity and investment fund shares or units	$\checkmark$		✓		$\checkmark$	$\checkmark$		~		$\checkmark$	$\checkmark$	$\checkmark$	✓		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
		Insurance, pension, and standardized guarantee schemes	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
		Financial derivatives and employee stock options	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
Residents		Other accounts receivable/payable	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	
Residents		Monetary gold and SDRs																					$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			
		Currency and deposits	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			
		Debt securities	$\checkmark$	$\checkmark$	~			$\checkmark$	~	~		$\checkmark$	$\checkmark$		✓			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		~	$\checkmark$	$\checkmark$		
	General	Loans	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$		~	$\checkmark$			
	government	Equity and investment fund shares or units	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		
		Insurance, pension, and standardized guarantee schemes	$\checkmark$	$\checkmark$				~	~			$\checkmark$	~					$\checkmark$	$\checkmark$				$\checkmark$	~		~		~	$\checkmark$			
		Financial derivatives and employee stock options	~	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			
		Other accounts receivable/payable	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			
		Monetary gold and SDRs																														
		Currency and deposits*	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
	Households	Debt securities	$\checkmark$		~			$\checkmark$		~		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$		
	and nonprofit	Loans	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
	institutions serving	Equity and investment fund shares or units																														
	households	Insurance, pension, and standardized guarantee schemes	~					~				$\checkmark$	~	$\checkmark$				$\checkmark$					$\checkmark$			~		$\checkmark$				
		Financial derivatives and employee stock options	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$				
		Other accounts receivable/ payable	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$					$\checkmark$			$\checkmark$		$\checkmark$	11			

# Table 4 (continued): Interlinkages Between Rec #15 and Recs #7, #12, and #17 as Reflected in the Financial Account/Financial Balance Sheet of the SNA Integrated Sector Accounts Part of a system of institutional sector accounts (financial account and financial balance sheet)

		Residents															Nonresidents					All creditors									
Creditor by residency and resident sector Debtor by residency and resident sector and by financial instrument			Nonfinancial corporations					Financial corporations and subsectors					Gener	al gove	ernment	Households and nonprofit institutions serving households															
		SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP	MFS	SNA	GFS	HSS	IIP N	MFS	SNA	GFS	HSS	IIP	MFS
	Monetary gold and SDRs						$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	~		$\checkmark$																
	Currency and deposits	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	✓		✓		$\checkmark$			$\checkmark$											
	Debt securities	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	~	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$											
	Loans	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	✓		$\checkmark$		$\checkmark$			$\checkmark$											
Nonresidents	Equity and investment fund shares or units	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	$\checkmark$	✓		$\checkmark$		$\checkmark$	$\checkmark$											
	Insurance, pension, and standardized guarantee schemes	~			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	~		$\checkmark$		~			~											
	Financial derivatives and employee stock options	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$			$\checkmark$											
	Other accounts receivable/payable	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$			$\checkmark$											
	Monetary gold and SDRs						$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$																		
	Currency and deposits	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$														
	Debt securities	$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$												
	Loans	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$														
All debtors	Equity and investment fund shares or units	$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$												
	Insurance, pension and standardized guarantee schemes	~					$\checkmark$				$\checkmark$	~	~				~														
	Financial derivatives and employee stock options	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$														
	Other accounts receivable/ payable	$\checkmark$					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$														

Notes:

= Not applicable

= Not relevant from a national orientation

\* = Conceptually possible but practically insignificant or nonexistent.

MFS = Monetary and Financial Statistics

*HSS* = *Handbook on Securities Statistics* (Recommendation #7)

IIP = International Investment Position (Recommendation #12)

GFS = Government Finance Statistics (Recommendation #17)

SNA = System of National Accounts (Recommendation #15) standards for sectors other than Financial corporations, General Government, and the Rest of the World.

All other standards noted—MFS, HSS, GFS, and IIP—flow from the SNA sector standards for Financial corporations, General Government, and the Rest of the World.

<sup>1/</sup>GFS data are presented on a consolidated basis so presenting the general government sector as if only a single unit existed.

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